



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2011-0909; Directorate Identifier 2011-NM-027-AD]

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (NPRM); reopening of comment period.

SUMMARY: We are revising an earlier proposed airworthiness directive (AD) for all The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes. That NPRM proposed repetitive high frequency eddy current (HFEC) inspections for cracking of the left and right rib hinge bearing lugs of the aft face of the center section of the horizontal stabilizer; measuring crack length and blending out cracks; and replacing the horizontal stabilizer center section rib, if necessary. That NPRM was prompted by reports of cracks of the hinge bearing lugs of the center section ribs of the horizontal stabilizer. This action revises that NPRM by adding the requirement for rib replacement if cracking is found during certain inspections of this proposed AD. We are proposing this supplemental NPRM to detect and correct cracking in the hinge bearing lugs of the horizontal stabilizer center section ribs, which could result in failure of the lugs, resulting in the inability of the horizontal stabilizer to sustain the required limit loads and consequent loss of control of the airplane. Since these actions impose an additional burden over that proposed in the NPRM, we are reopening the comment period to allow the public the chance to comment on these proposed changes.

DATES: We must receive comments on this supplemental NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and

other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Roger Durbin, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: (562) 627-5233; fax: (562) 627-5210; email: roger.durbin@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2011-0909; Directorate Identifier 2011-NM-027-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We issued an NPRM to amend 14 CFR part 39 to include an AD that would apply to The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes. That NPRM published in the Federal Register on August 26, 2011 (76 FR 53346). That NPRM proposed to require repetitive HFEC inspections for cracking of the left and right rib hinge

bearing lugs of the aft face of the center section of the horizontal stabilizer; measuring crack length and blending out cracks; and replacing the horizontal stabilizer center section rib, if necessary.

Actions Since NPRM (76 FR 53346, August 26, 2011) was Issued

Since we issued the previous NPRM (76 FR 53346, August 26, 2011), we determined a required corrective action was not specified by Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011. Therefore, we propose to add a requirement for rib replacement if cracking is found during certain inspections required by this supplemental NPRM.

Comments

We gave the public the opportunity to comment on the previous NPRM (76 FR 53346, August 26, 2011). The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM (76 FR 53346, August 26, 2011)

Boeing stated it supports the NPRM (76 FR 53346, August 26, 2011).

Recognition that Reporting of Findings is Not Required

American Airlines stated it recognizes that reporting of findings requested by Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011, is not required by the NPRM (76 FR 53346, August 26, 2011).

We acknowledge American Airlines's comment. Reporting is not required by the supplemental NPRM. We have not changed the supplemental NPRM in this regard.

FAA's Determination

We are proposing this supplemental NPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of these same type designs. Certain changes described above expand the scope of the previous NPRM (76 FR 53346,

August 26, 2011). As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this supplemental NPRM.

Proposed Requirements of the Supplemental NPRM

This supplemental NPRM would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between the Supplemental NPRM and the Service Information.”

Differences Between the Supplemental NPRM and the Service Information

Although Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011, specifies to send the inspection results to the manufacturer, this proposed supplemental NPRM would not require any report.

Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011, does not specify instructions for replacing a horizontal stabilizer center section rib. If crack length exceeds a certain specified length or if cracking is found during any inspection of a blend-out repair, paragraphs (h)(2) and (j)(2) of this supplemental NPRM would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

Interim Action

We consider this supplemental NPRM interim action since investigation is ongoing and no terminating action has been developed yet. The manufacturer is currently developing a modification that will address the unsafe condition identified in this supplemental NPRM. Once this modification is developed, approved, and available, we may consider additional rulemaking.

Costs of Compliance

We estimate that this proposed AD affects 668 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspection	6 work-hours X \$85 per hour = \$510 per inspection cycle	\$0	\$510	\$340,680 per inspection cycle

We have received no definitive data that would enable us to provide labor cost estimates for the on-condition actions (blend-out repair(s) or replacement of center section rib(s)) specified in this proposed AD. However, we have been advised that replacement parts would be \$14,500 per repair kit for each horizontal stabilizer rib.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct

effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2011-0909; Directorate Identifier 2011-NM-027-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011.

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Unsafe Condition

This AD was prompted by reports of cracks of the hinge bearing lugs of the center section ribs of the horizontal stabilizer. We are issuing this AD to detect and correct cracking in the hinge bearing lugs of the horizontal stabilizer center section ribs, which could result in failure of the lugs, resulting in the inability of the horizontal stabilizer to sustain the required limit loads and consequent loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection of Horizontal Stabilizer Ribs Made from 7075-T7351 Material

For Group 1 airplanes, as identified in Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011: Before the accumulation of 23,000 total flight cycles, or within 4,383 flight cycles after the effective date of this AD, whichever occurs later, do a high frequency eddy current (HFEC) inspection for cracking of the left and right rib hinge bearing lugs of the aft face of the center section of the horizontal stabilizer, in accordance with the Accomplishment Instructions of Boeing Alert Service

Bulletin MD80-55A069, dated January 19, 2011. For any crack-free lug, repeat the inspection thereafter at intervals not to exceed 8,200 flight cycles.

(h) Repair and Replacement for Cracking of 7075-T7351 Material

If, during any inspection required by paragraph (g) of this AD, any crack is found: Before further flight, measure the length of the crack between the points specified in Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011. Do the action in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011.

(1) If the crack length between points 'A' and 'B' is less than or equal to 0.15 inch and the crack length between points 'C' and 'D' is less than or equal to 0.05 inch: Before further flight, blend out the crack, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011. Within 15,600 flight cycles after doing the blend-out, do an HFEC inspection of the blendout on the center section rib hinge bearing lug for cracking, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011.

(i) If no cracking is found, repeat the inspection thereafter at intervals not to exceed 3,900 flight cycles.

(ii) If cracking is found during any inspection of the blend out, before further flight, do the replacement required by paragraph (h)(2) of this AD, and do the inspections required by paragraph (h)(2) of this AD at the times specified in paragraph (h)(2) of this AD.

(2) If the crack length between points 'A' and 'B' is greater than 0.15 inch or the crack length between points 'C' and 'D' is greater than 0.05 inch: Before further flight, replace the horizontal stabilizer center section rib with a new horizontal stabilizer center section rib, using a method approved in accordance with the

procedures specified in paragraph (l) of this AD. Repeat the inspection required by paragraph (g) of this AD one time before the accumulation of 23,000 total flight cycles on the new horizontal stabilizer center section rib, and thereafter at intervals not to exceed 11,300 flight cycles.

(i) Inspection of Horizontal Stabilizer Ribs Made from 7050-T7451 Material

For Group 2 airplanes, as identified in Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011: Before the accumulation of 23,000 total flight cycles, or within 4,383 flight cycles after the effective date of this AD, whichever occurs later, do an HFEC inspection for cracking of the left and right rib hinge bearing lugs of the aft face of the center section of the horizontal stabilizer, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011. For any crack-free lug, repeat the inspection thereafter at intervals not to exceed 11,300 flight cycles.

(j) Repair and Replacement for Cracking of 7050-T7451 Material

If, during any inspection required by paragraph (i) of this AD, any crack is found: Before further flight, measure the length of the crack between the points specified in and in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011.

(1) If the crack length between points 'A' and 'B' is less than or equal to 0.15 inch and the crack length between points 'C' and 'D' is less than or equal to 0.05 inch: Before further flight, blend out the crack, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011. Within 15,600 flight cycles after doing the blend out, do an HFEC inspection of the blend out on the center section rib hinge bearing lug for cracking, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011.

(i) If no cracking is found, repeat the inspection thereafter at intervals not to exceed 5,800 flight cycles.

(ii) If cracking is found during any inspection of the blend out, before further flight, do the replacement required by paragraph (j)(2) of this AD, and do the inspections required by paragraph (j)(2) of this AD at the times specified in paragraph (j)(2) of this AD.

(2) If the crack length between points 'A' and 'B' is greater than 0.15 inch or the crack length between points 'C' and 'D' is greater than 0.05 inch: Before further flight, replace the horizontal stabilizer center section rib with a new horizontal stabilizer center section rib, using a method approved in accordance with the procedures specified in paragraph (l) of this AD. Repeat the inspection required by paragraph (i) of this AD one time before the accumulation of 23,000 total flight cycles on the new horizontal stabilizer center section rib, and thereafter at intervals not to exceed 11,300 flight cycles.

(k) No Reporting Requirement

Although Boeing Alert Service Bulletin MD80-55A069, dated January 19, 2011, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

(m) Related Information

(1) For more information about this AD, contact Roger Durbin, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: (562) 627-5233; fax: (562) 627-5210; email: roger.durbin@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on September 4, 2012.

Ali Bahrami,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2012-22314 Filed 09/10/2012 at 8:45 am; Publication Date: 09/11/2012]